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May 1978

PLEASE RE



MONTANA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL SCIENCES

Monthly Activities Report
of the Air Quality Bureau

May, 1978

STATE DOCUMENTS COLLECTION

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1. Highlights:

New engineer for Billings office began work on May 1.

Board of Health hearing held on open burning rule change.

2. Ambient Air Quality Network:

a. Standards Exceeded

SO₂ violations (Butte-Anaconda) Hiway Jct. Mill Creek Lincoln School

Excur. over 0.25 ppm	0	0	0
High 24-hour average	0	0	0
High hourly average	0	0	0

SO₂ violations from company stations near Anaconda smelter

State 1-hour	107
State 24-hour	18
Federal 24-hour	7
Federal 3-hour	10

Hi-vol standards exceeded	City	Station	Date	150 ug/m ³ Fed. Sec. Std.	200 ug/m ³ St. Std.
	Butte	Gilmans	5/14	191	---
	Col. Falls	Anders	5/2	187	---
	Col. Falls	Anders	5/8	208	208
	Col. Falls	Anders	5/20	182	---
	Col. Falls	Anders	5/26	170	---
	E. Helena	Hastie	5/14	160	---
	Kalispell	Sherman	5/26	411	411
	Libby	Brown	5/3	205	205
	Three Forks	Kober	5/14	184	---

b. Air Stagnation Advisories - None in May

c. Laboratory Status

Total determinations for month	1378
Total samples for month	258

d. Other

EPA, Region VIII, audited ozone monitors in Missoula and Butte.
Results were acceptable.

1/1/11

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3. Permits and Tax Credits:

a. Construction Permits - Applied For

R. J. Studer and Sons, Rosebud Co., drier, mixer, scrubber
R. J. Studer and Sons, Rosebud Co., jaw crusher, cones, screen plants, roll plant
Meyer Construction, Chouteau Co., pioneer and crushing spread
Meyer Construction, Sweet Grass Co., pioneer and crushing spread
Meyer Construction, Broadwater Co., pioneer and crushing spread
Highway Department, Flathead Co., portable hot mix asphalt plant
Livingston Memorial Hospital, Livingston, incinerator
Westmoreland Resources, Big Horn Co., coal-fired boilers
Westmoreland Resources, Big Horn Co., crusher, storage barn, conveyer belts
Peter Kiewit Sons, Flathead Co., portable hot mix asphalt plant
Rumin Activator Feeds, Three Forks, manure dehydrating plant
Hilde Construction Co., Rosebud Co., portable gravel crushing and hot mix asphalt plant
Zook Brothers Construction, Cascade, Teton, Lewis and Clark Counties, portable gravel crushing plant
Meyer Construction, Hill Co., portable asphalt hot mix plant
R-Lite Concrete Products, Inc., Granite Co., portable gravel crushing plant
Great Western Sugar, Billings, fly ash collector

Construction Permits - Approved

Long Construction, Lake Co., portable hot mix asphalt plant
Halliburton Services, Malta, storage tanks, elevator and conveyors for sand handling plant
Baltrusch Construction, Gallatin Co., portable asphalt hot mix plant
Baltrusch Construction, Gallatin Co., portable gravel crushing plant
Baltrusch Construction, Lake Co. portable hot mix asphalt plant
Baltrusch Construction, Lake Co., portable gravel crushing plant
Highway Department, Sweet Grass, Gallatin, Madison and Park Counties, portable hot mix asphalt plant
Exxon Refinery, East of Billings, recovery vacuum pipestill gases
Zook Brothers, Lewis & Clark Co., portable gravel crushing plant
Highway Department, Big Horn Co., portable asphalt plant
R. J. Studer and Sons, Rosebud Co., drier, mixer, scrubber
R. J. Studer and Sons, Rosebud Co., jaw crusher, cones, screen plants, roll plant
Meyer Construction, Chouteau Co., pioneer and crushing spread
Meyer Construction, Sweet Grass Co., pioneer and crushing spread
Meyer Construction, Broadwater Co., pioneer and crushing spread
Highway Department, Flathead Co., portable hot mix asphalt plant
Livingston Memorial Hospital, Livingston, incinerator
Peter Kiewit Sons, Flathead Co., portable hot mix asphalt plant

c. Tax Credits

Montana Power and Puget Power have applied for additional tax credits on Colstrip Units 1 and 2.

Exxon has submitted 23 applications.

W. R. Grace, Libby, baghouse on scavenger dust system, cost is \$81,000

4. Variance Status:

a. Current

ASARCO, Inc. has applied for a variance from Section of Rule S1470 which applies to lead smelters. Presently it is anticipated that the request will be heard on July 14, 1978.

SO₂ variance for The Anaconda Company was renewed in December, 1977. It expires June 30, 1978.

The variance from the visible emissions and process weight rules for The Anaconda Company foundry expires on June 30, 1978.

Anaconda's application for variance from the visibility rule for smelter has not been scheduled.

Anaconda Aluminum, Columbia Falls, fluoride and particulate, expires June 30, 1978.

b. New - None in May

5. Enforcement Actions:

a. Citations

Park Lumber, Livingston, 780501-BR-3, teepee burner in violation of rule 16-2.14(1)-S14030 (Wood Waste Burners)

Burkland Studs, Livingston, 780501-BR-2, teepee burner in violation of rule 16-2.14(1)-S14030 (Wood Waste Burner)

Brand S Lumber, Livingston, 780501-BR-1, teepee burner in violation of rule 16-2.14(1)-S14030 (Wood Waste Burner)

Brand S Lumber, Lewistown, 780524-FG-1, teepee burner in violation of rules 16-2.14(1)-S1400 (Permits) and 16-2.14(1)-S14030 (Wood Waste Burner)

Champion International Corporation, Missoula, 780526-JB-1, smelt tank in violation of rule 16-2.14(1)-S1400 (Permits)

Willow Creek Lumber, Livingston, 780526-FG-1, teepee burner in violation of rule 16-2.14(1)-S14030 (Wood Waste Burner)

b. Notice of Violation - None

c. Order for Corrective Action - None

d. Court Actions - None

6. Tepee Burner and Open Burning:

Tepee burner status:	No. at start	41
	New starts	0
	Shutdowns	0
	No. at end	41

Burning Permits

Kalispell Office	289	Sanders County	129
Cascade County	21	Yellowstone County	53
Lake County	104	Rest of State	756
Missoula County	58	Total	1430

7. Source Tests Performed:

- a. Agency Source Tests - None
- b. Non-agency Tests

Hoerner-Waldorf, Missoula, seventeen particulate tests on recovery boilers, lime kilns, smelt tanks, hogged fuel boiler.

NSPS tests of batch plant owned by Portable Pavers was witnessed May 25.

8. Field Investigations:

Brand S Lumber, Lewistown, violation of tepee burner and construction permit rules, citation issued

Willow Creek Lumber, Livingston, excess opacity of burner plume, citation

Spring Creek Forest Products, Judith Gap, investigation, given to mid-June to get burner control systems operating

Grain elevator, Miles City, inspection, not operating

MDU's peaking plant, Miles City, inspection, not operating

Gasoline tank, Cenex's Yale Tank Farm, Billings, inspection

R. J. Studer Co., Reedpoint, hot mix asphalt plant, inspection

Brand S Lumber, Livingston, fire at base of tepee burner, extinguished

Brand S Lumber, Livingston, tepee burner, no pyrometer, citation issued

Burkland Studs, Livingston, tepee burner, visible emissions, citation

Park Lumber, Livingston, tepee burner, inoperative pyrometer, citation

Gilman's Excavating, Butte, asphalt plant, inspection

RiteWay Asphalt, Butte, asphalt plant, inspection

Montana Pole Company, Butte, inspection

Silver Bow County, Butte, crusher and asphalt plant, inspection

Champion International, Silver City, tepee burner, inspection

Big Sky Asphalt, Helena, asphalt plant and crusher, inspection

Helena Sand and Gravel, Helena, asphalt plant and crusher, inspection

Kaiser Cement, Montana City, inspection

Anaconda crusher and concentrator, Butte, inspection

Plum Creek Fiberboard Plant, Columbia Falls, conference about cyclone

State Highway Department, Kalispell, batchplant, inspection

Flathead County Landfill, Kalispell, inspection of woodwaste area

8. Field Investigations, cont.

Proposed mill site, Fortine, inspection of proposed development
Pack and Co., Kalispell, inventory update
Plum Creek MDF, plywood, sawmill, Columbia Falls, inventory update
Superior Building, Columbia Falls, inventory update
Kal-Mont Lumber, Kalispell, inventory update
American Asphalt, Kalispell, inventory update
Flathead County, Kalispell, batch plant, inventory update
City of Kalispell, batch plant, inventory update
Klingler Lumber, Kalispell, inventory update
Louisiana-Pacific, Columbia Falls, inventory update
Stoltze Land & Lumber, Columbia Falls, inventory update
Montana Lumber & Plywood, Kalispell, inventory update
Kalispell Pole & Timber, Kalispell, inventory update
Oil field, North of Shelby, inspection
Stauffer Chemical, Butte, discussing fluoride problem and contingency plan
Chicken manure dryer, Three Forks, operating without permit, inspection

9. Complaints:

Oil wells, Sidney, H₂S hazard, referred to Billings regional office
RiteWay Asphalt, Butte, smoke and odor, under Order to Take Corrective Action
Baker Landfill, Baker, open burning, referred to city engineer
Individual, East Kalispell, weed spraying by county

10. Data Processing Services

a. Ambient Data Summary - See attached for April

b. Emission Inventory Status

Significant number of inventory updates were received as part of SIP revision. A short course was given to staff on EIS/P&R system.

c. Prevention of Significant Deterioration

Reviewed new Federal Registers on PSD program and answered several requests for information.

d. Modeling

Discussed Anaconda Company situation with staff and Legal Division, since current variance expires soon.

11. Environmental Impact Statements:

a. Agency Impact Determinations: None in May

b. Other Agency EIS's Reviewed: None in May

12. Status of Studies, Contracts, and Reports:

Poplar River Study continues to operate with no problems
Flathead Study sites established and partial operation expected by mid-June
MAPS Meteorological study is partially operational
Columbia Falls Meteorological Study final data collection completed
Quarterly report of air quality data sent to EPA
ASARCO, East Helena Study bids submitted for study
ASARCO-Troy Project sampling continuing, completion approximately 90%
MAPS Emission Inventory Update and Improvement - MRI spent a week in
Billings sampling streets for emission factor development
MAPS Historical Emission Inventory - Anaconda Company denied HRA access
to historical files
Rockwell International - contract proposal to evaluate Anaconda's in-stack
instruments will be updated
EPA Studies of Anaconda's baghouse efficiency and helicopter sampling
program should be released soon.

13. Schools and Training:

Field trip to Shelby area oil field with representatives of Oil and Gas
Commission and industry people

Smoke generator operator's school, Athens, Georgia

14. Public Hearings and Meetings:

a. Public Hearings Held

Board of Health and Environmental Sciences, Helena

b. Meetings Attended

Flathead River Basin Study meeting, Kalispell
Lewis and Clark County Health Department, Helena, establishing county air
pollution control agency
Exxon personnel, Helena, hydrocarbon control
Air Force, Corps of Engineers, Malmstrom AFB, Great Falls, regarding
PSD, EIS, NSPS, monitoring and permits
EPA, Helena, mid-year evaluation
DNR, representative from Budget office, Helena, budget amendment for smoke
management
Information Systems Division, data processing system
Highway Department attorney, Helena, Reserve Street Bridge
Peter Kiewit Sons, Helena, asphalt plant permit
Bureau Chiefs, Legal, Helena, legislation
Missoula County Health Department, CO monitoring sites,
Zook Brothers Construction, Helena, asphalt plant testing
Lear Siegler representatives, Helena, continuous monitoring requirements

c. Intra-Staff Meetings

Staff meetings
MAPS meetings
MAAQS meetings
Meetings on SIP revisions
Meetings on budget for lab and FY 79

15. Public Information Requests

Rules 8
Clean Air Act 7
General Information 10

16. None

17. Other

One day was spent in the field orienting the new engineer for the Billings
Regional Office

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

MONTHLY SUMMARY OF AIR QUALITY DATA

April 1978

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Pollutant: Miscellaneous Indicators

Units:

AREA		HIGH READING			ARITHMETIC AVER.			Comments
AQCR	Site Location	Current Month	Year-to-Date	Running Year	Year-to-Date	No. of Samples	of Data	
144	Fluoride Papers	Mg/sq	cm/30 days					
	Gehloms Mt Box	1.180	1.200	1.610	1.122	4		
	Plathead Co							
	Anaconda South	12.460	12.760	27.480	12.010	4		
	McCone Co.							
	Glacier Park #1	0.490	0.640	0.640	0.430	4		
	Glac.Nat.Park							
	Glacier Park #2	0.580	0.550	0.580	0.320	4		
	Glac.Nat.Park							
144	Fluoride Plates	Mg/sq	cm/30 days					
	Anaconda South	5.350	12.950	37.850	16.202	4		
	Plathead Co.							
	Trailer-NAAC	1.500	1.610	2.000	1.420	4		
	Plathead Co.							
	Glacier Park #1	0.840	0.840	0.840	0.533	3		
	Glac.Nat.Park							
	Glacier Park #2	0.360	0.690	0.690	0.370	4		
	Glac.Nat.Park							
	Glacier Park #9	0.440	0.670	0.670	0.442	4		
	Glac.Nat.Park							

Pollutant: Miscellaneous Bubblers Data

Units: ppm

AREA		HIGH READING			ARITHMETIC AVER.			Comments
AQCR	Site Location	Current Month	Year-to-Date	Running Year	Year-to-Date	No. of Samples	of Data	
143	Sulfur Dioxide							
	Scobey	0.0	0.0	0.0	0.0	4		
	Daniels Co.							
	Port Peck	0.0	0.0	0.0	0.0	4		
143	Nitrogen Dioxide							
	Scobey	0.0	0.0	0.0	0.0	4		
	Daniels Co.							
	Port Peck	0.0	0.0	0.0	0.0	4		

** - No valid samples submitted

Pollutant: Miscellaneous Indicators

Units:

AREA		HIGH READING			ARITHMETIC AVER.			Comments
AQCR	Site Location	Current Month	Year-to-Date	Running Year	Year-to-Date	No. of Samples	of Data	
141	Outfall - tons/24 hr.							
	Mountain States							
	Great Falls							
	Fire Sta #1							
	Great Falls							
140	Sulfation Rate - mg Cu/100 sq cm							
	Billings							
	E. of Laurel	0.510	2.800	1.	1.837	3		
	Billings							
	Hi-Roll Trucking	1.130	1.890		1.312	4		
141	Stock Car Track							
	Great Falls							
	Phillips Ref N1							
	Great Falls							
	Phillips Ref E							
142	Microwave	0.120	0.400		0.310	4		
	East Helena							
	212 E. Pacific	0.180	0.400		0.267	3		
	East Helena							
	East Stuck Sta	0.300	0.500		0.360	4		

** - Data unavailable

Pollutant: Total Suspended Particulate

Units: ug/cu meter

AREA		HIGH READING			ARITHMETIC AVER.			Comments
AQCR	Site Location	Current Month	Year-to-Date	Running Year	Year-to-Date	No. of Samples	of Data	
140	Morton-Decker	88	209	209	67.5	4		
	Big Horn Co.							
	Warren Ranch	68	68	108	20.1	4		
	Big Horn Co.							
	Lockwood School	122	135	166	58.8	4		
	Billings							
	KOH	60	87	163	37.9	4		
	Billings							
	City Hall	103	175	175	76.9	4		
	Billings							
141	Grand Ave. Sch.	110	171	171	51.7	4		
	Billings							
	Laurel Jr. High	53	76	150	42.8	4		
	Laurel							
	Hospital Roof	59	121	225	48.1	4		
	Great Falls							
	Fire Sta #1	85	123	141	71.5	4		
	Great Falls							
	10th Ave. So.							
	Great Falls							
142	Hilkey Jet	25	94	161	30.6	4		
	Anaconda							
	McKinley Res	84	267	267	59.8	4		
	Granite Co.							
	Greeley School	111	195	233	90.8	4		

* - Site no longer submitting data

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES
MONTHLY SUMMARY OF AIR QUALITY DATA

April 1978

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Pollutant: Total Suspended Particulate Units: ug/cu meter

AREA		HIGH READING			ARITHMETIC AVER.		Comments
AQCR	Site Location	Current Month	Year-to-Date	Running Year	Year-to-Date	No. of Days of Data	
142	Atkins Res.	25	60	107	28.2	4	
	Walkerville						
	Richer Res.	22	53	53	20.9	4	
	Silver Bow Co.						
	Tierney Res.	29	68	89	26.1	4	
	Silver Bow Co.						
	Microwave	25	52	103	25.1	4	
	Jefferson Co.						
	212 E. Pacific	76	163	192	77.0	4	
	Lewis & Clark						
	Kober Res.	116	226	309	62.6	4	
	Three Forks						
	Cogswell Blvd #1	50	234	234	64.5	4	
	Helena						
143	Glennville						
	Dawson Co.						
	Lane Deer						
	Rosebud Co.						
	Fort Peck	37	37	88	9.2	4	
	McCona Co.						
	Broadus	51	51	275	15.8	4	
	Powder Riv. Co.						
	BN Site						
	Colstrip						
	Border Site	25	25	84	10.8	4	
	Scobey						

** - No valid samples submitted

Pollutant: Total Suspended Particulate Units: ug/cu meter

AREA		HIGH READING			ARITHMETIC AVER.		Comments
AQCR	Site Location	Current Month	Year-to-Date	Running Year	Year-to-Date	No. of Days of Data	
144	Anders Res.	328	426	467	138.8	4	2 exc Fed Sec St
	Col. Falls						1 exc Fed Pri St
	Courthouse Roof	158	390	390	110.2	4	1 exc Fed Sec St
	Missoula						
	Courthouse Lawn	228	457	457	131.7	4	1 exc Mt. Pri St
	Missoula						
	Lion's Park	172	676	676	146.1	4	1 exc Fed Sec St
	Missoula						
	J8 Field	79	154	180	54.6	4	
	Missoula						
	Hoerner Wald #1	30	144	144	34.5	4	
	Missoula Co.						
	Hoerner Wald #2	38	135	135	35.2	4	
	Missoula Co.						
	Hoerner Wald #3	29	86	86	25.1	4	
	Missoula Co.						
	Kallispell	138	272	272	90.2	4	
	Plathead Co.						
	Troy-Brown	166	247	247	85.1	4	1 exc Fed Sec St
	Lincoln Co.						
	Troy-Sampson	9	29	171	11.5	4	
	Lincoln Co.						
	Libby-Brown	170	394	394	141.1	4	1 exc Fed Sec St
	Lincoln Co.						

Pollutant: Miscellaneous Continuous Data Units: ppm

AREA		HIGH READING			ARITHMETIC AVER.		Comments
AQCR	Site Location	Current Month	Year-to-Date	Running Year	Year-to-Date	No. of Days of Data	
140	Carbon Monoxide						
	27th & Montana						
	Billings						
141	10th Ave. South						
	Great Falls						
142	Alpine West	2.00	12.50	14.00	1.070	4	
	Butte						
144	Malfunction Jct.						
	Missoula						
	Lion's Park						
	Missoula						
	Hydrocarbons						
140	27th & Montana	7.50	11.40	26.40	4.006	4	
	Billings						
144	Lion's Park	2.38	5.00	7.62	2.047	4	
	Missoula						
	Nitrogen Dioxide						
140	27th & Montana						
	Billings						
142	Hebgen Park	0.03	0.03	0.03	0.006	1	
	Butte						
144	Lion's Park	0.05	0.10	0.10	0.020	4	

** - Data unavailable at time of report

Pollutant: Miscellaneous Continuous Data Units: ppm

AREA		HIGH READING			ARITHMETIC AVER.		Comments
AQCR	Site Location	Current Month	Year-to-Date	Running Year	Year-to-Date	No. of Days of Data	
	Ozone						
140	27th & Montana	0.04	0.12	0.12	0.018	4	
	Billings						
142	Hebgen Park	0.05	0.05	0.05	0.024	1	
	Butte						
144	Lion's Park						
	Missoula						
	Sulfur Dioxide						
140	27th & Montana	0.09	0.17	0.17	0.002	4	
	Billings						
	Laurel Farm	0.21	0.66	0.66	0.050	4	
	Billings						
142	East Stack	0.10	0.48	0.66	0.008	4	
	E. Helena						
	Microwave	0.20	0.32	1.40	0.010	4	
	E. Helena						
	Broudy Ranch	0.17	0.80	0.88	0.013	4	
	E. Helena						
	C-1111						
	Anaconda						
	Highway Jct.	1.34	2.00	2.00	0.075	4	2 exc Nat. 3-hr St
	Anaconda						2 exc Nat. 24-hr.
	Post Office						
	Anaconda						
	Mill Creek	1.00	1.08	1.68	0.042	4	9 exc Nat 3-hr
	Anaconda						7 exc Nat 24-hr.
	Lincoln School	1.21	1.21	1.21	0.036	2	5 exc Nat 3-hr.
	Anaconda						3 exc Nat 24-hr.

** - Site no longer submitting data

*** - Analyzer down - no data

